REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the amendments above and the remarks below.

Amendments to the Drawings

In the second Office Action, the drawings were rejected under 37 C.F.R. §1.83(a) because they fail to show the outer peripheral surface, 180, as described in the specification. Applicant has corrected this informality identified by the Examiner and submits Replacement Sheets 1-3 comprising FIGS. 1-5B attached hereto as Appendix A and labeled as "Replacement Sheet" (in response to the Notice of Non-Complaint Amendment), each including reference to outer peripheral surface 180, which includes both outer peripheral surfaces 180A and 180B. A marked up copy of the drawing sheets in red ink is also attached hereto and labeled as "Mark Up Copy" for easy reference to the revisions made. No new matter has been added to the application by the amendment to the drawings. Accordingly, withdrawal of this objection and approval of the drawings is respectfully requested.

35 U.S.C. §112 Rejection

In the second Office Action, claim 18 was rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. By the instant amendment, Applicant cancels claim 18.

35 U.S.C. §102 Rejection

In the second Office Action, claims 1-4, 6-11 and 13-18 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Wynn (U.S. Patent No. 4,129,145).

Briefly summarized, applicant's invention is directed to a check valve comprising a body configured to permit fluid to flow therethrough. The body includes a flange extending circumferentially around an inner periphery of the body. The flange has an inner surface defining a valve aperture. The check valve also comprises a poppet valve moveably mounted within the valve aperture. The poppet valve includes a longitudinal axis, a head and a plurality of guide legs that extend from the head and through the valve aperture. Each of the plurality of legs include an outer peripheral surface facing the inner surface of the flange. In one aspect of the present invention as recited in claim 1, the outer peripheral surface includes a first section and a second section, wherein the second section is recessed back from the first section in relation to the inner surface of the flange. In another aspect of the present invention, as recited in claim 8, the outer peripheral surface includes a first section spaced at a first radial distance from the longitudinal axis and a second section spaced at a second radial distance from the longitudinal axis to allow debris to pass between the second section and the inner surface of the flange while the valve is in an open position, wherein the first radial distance is greater than the second radial distance. In yet another aspect of the present invention, as recited in claim 15, a flow path is defined between a section of the outer peripheral surface and the inner surface of the flange while the poppet valve is in an open position to allow for debris to pass between the outer peripheral surfaces and the inner surface of the flange. As discussed in the Specification in paragraph [0032], a flow path is formed between second section 180B, which is cut back from first section 180A of guide legs, and the inner surface of the valve aperture by the flange 104 when the poppet valve is in an open position.

Applicant recognized that a portion of the outer peripheral surface of each of the plurality of guide legs being recessed, cut back or at a smaller radial distance from the longitudinal axis of

the poppet valve from the rest of the outer peripheral surface of each guide leg provides for self cleaning of the valve by allowing debris to pass through the valve while preventing the lodging of the guide legs by debris in the valve aperture. The poppet valve moves around more with the recessed or cut back sections during operation, which assist in shaking or cleaning out debris that, in the past, lodged between the guide legs and inner surface of the flange. See Specification, paragraph [0007].

In contrast, Wynn (U.S. Patent No. 4,129,145) discloses a check valve assembly consisting of a poppet element 22 having a poppet head, with a circumferential surface 24 having a narrow neck 26 and a frustoconical surface 28, and thin stem 30. Stem 30 has a pair of outwardly directed flanges 31, 32 at its upstream end. The outer edges of flanges 31, 32 are proximate and conform to the interior surface of the valve body. Col. 2, line 65 to Col. 3, line 1. An O-ring 38 is slipped over the upstream end or poppet head of poppet element 22 and located in neck 26 of circumscribing surface 24. FIGS. 1B-1C; Col. 3, lines 7-10. O-ring 38 provides a closure for the valve. Col. 3, lines 15-16. When fluid is flowing, fluid flows freely through a gap provided between O-ring 38 and the inclined seating surface 16 of the valve seat 14, as depicted by arrows 46 in FIG. 1A. Col. 3, lines 26-32. When the fluid flow reverses, O-ring 38 is compressed between the frustoconical surface 28 of poppet element 22 and the inclined seating surface 16 of valve seat 14 so that an effective seal can be provided. Col. 3, lines 33-39.

When asserting a §102 rejection, it is well established that there is no anticipation unless (1) all the same elements are (2) found in exactly the same situation and (3) are united in the same way to (4) perform the identical function.

As discussed above, the independent claims require a poppet valve with a head and a plurality of guide legs extending from the head through the valve aperture. The claims also

require that the outer peripheral surfaces of the guide legs include one section that is recessed back from, cut away from or at a greater radial distance from the longitudinal axis of the poppet valve in relation to another section.

In support of the rejection, the Examiner asserts that Wynn discloses the following (while referring to the reference numbers used in Wynn):

> a plurality of guide legs (31, 32) extending from the head and through the valve aperture, each of the plurality of guide legs (31, 32) including an outer peripheral surface facing the inner surface of the flange, the outer peripheral surface including a first section (smaller portion of 24) and a second section (22, 30), wherein the second section is recessed back from the first section in relation to the inner surface of the flange, as shown in figure 3.

Based on this description, the Examiner improperly points to narrow neck 26 (i.e. smaller portion of circumferential surface 24) of a head of the poppet valve to refer to a first section of the outer peripheral surfaces of the guide legs, and the flanges of stem 30 to refer to a second section of the outer peripheral surfaces of the guide legs in an attempt to show that Wynn discloses each element recited in the independent claims. However, the independent claims of the present invention specifically recite (1) a head and (2) a plurality of guide legs extending from the head through the valve aperture. The recitation in the claims of an outer peripheral surface is directed specifically to the guide legs, not the poppet head. If the Examiner considers circumferential surface 24 as part of the guide legs, then Wynn does not disclose a poppet head, as required by the claims of the present invention. Further, circumscribing surface 24 in Wynn does not extend from a head through a valve aperture. Therefore, the Examiner's characterization of Wynn in relation to the elements of independent claims 1, 8 and 15 does not describe all the same elements found in exactly the same situation and united in the same way to perform the identical function as recited in the independent claims of the present invention.

Wynn also discloses the use of an O-ring 38 located in the neck 26 of circumscribing surface 24 that becomes compressed between the frustoconical surface 28 of poppet element 22 and the inclined seating surface 16 of valve seat 14 to form a seal and to provide a closure for the valve. Col. 3, lines 7-16, lines 36-40. While fluid flows through the Wynn valve in an open position, fluid is passes through a gap provided between O-ring 38 and the inclined seating surface 16 of valve seat 14. As recognized by Applicant, a portion of the outer peripheral surface of each of the plurality of guide legs being recessed, cut back or at a smaller radial distance from the longitudinal axis of the poppet valve from the rest of the outer peripheral surface of each guide leg provides for self cleaning of the valve by allowing debris to pass through the valve while preventing the lodging of the guide legs by debris in the valve aperture. With the presence of O-ring 38, the circumscribing surface 24 in Wynn, including frustoconical surface 28, does not perform the identical function as the two different sections of the guide legs recited in the claims.

Further, flanges 31, 32 of stem 30 in Wynn are described as proximate and conform to the interior surface of valve body 10. Col. 2, line 67 to Col. 3, line 1. Therefore, the outer peripheral surfaces of stem 30 disclosed in Wynn does not have one section that is recessed back from, cut away from or at a greater radial distance from the longitudinal axis of the poppet valve in relation to another section, as required by independent claims 1, 8 and 15.

It is respectfully submitted that the above anticipation rejections of claims 1-4, 6-11 and 13-18 are now overcome and withdrawal of this grounds for rejection and allowance of these claims are respectfully requested.

CONCLUSION

For all of the above reasons, it is respectfully submitted that independent claims 1, 8 and 15 are patentable over the applied prior art. The dependent claims are believed allowable for the same reasons noted above in connection with independent claims from which they directly or ultimately depend, as well as for their own additional features.

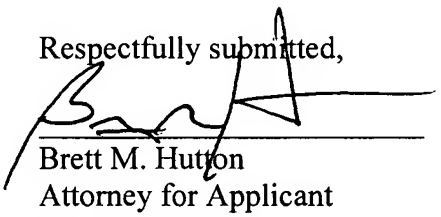
It is believed that the application is in condition for allowance, and such action is respectfully requested.

If a telephone conference would be of assistance in advancing the prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided.

If any extension of time is required for this Response, the Office may charge Deposit Account No. 081935 of the undersigned.

Dated: January 23, 2006

Respectfully submitted,



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In the Drawings:

Please replace the originally presented drawing sheets 1-3 containing Figures 1-5B, attached hereto and labeled as "Mark-Up Copy", with the replacement drawing Sheets 1-3 containing Figures 1-5B, attached hereto in Appendix A and labeled as "Replacement Sheet."

Appendix A

MARK UP COPY

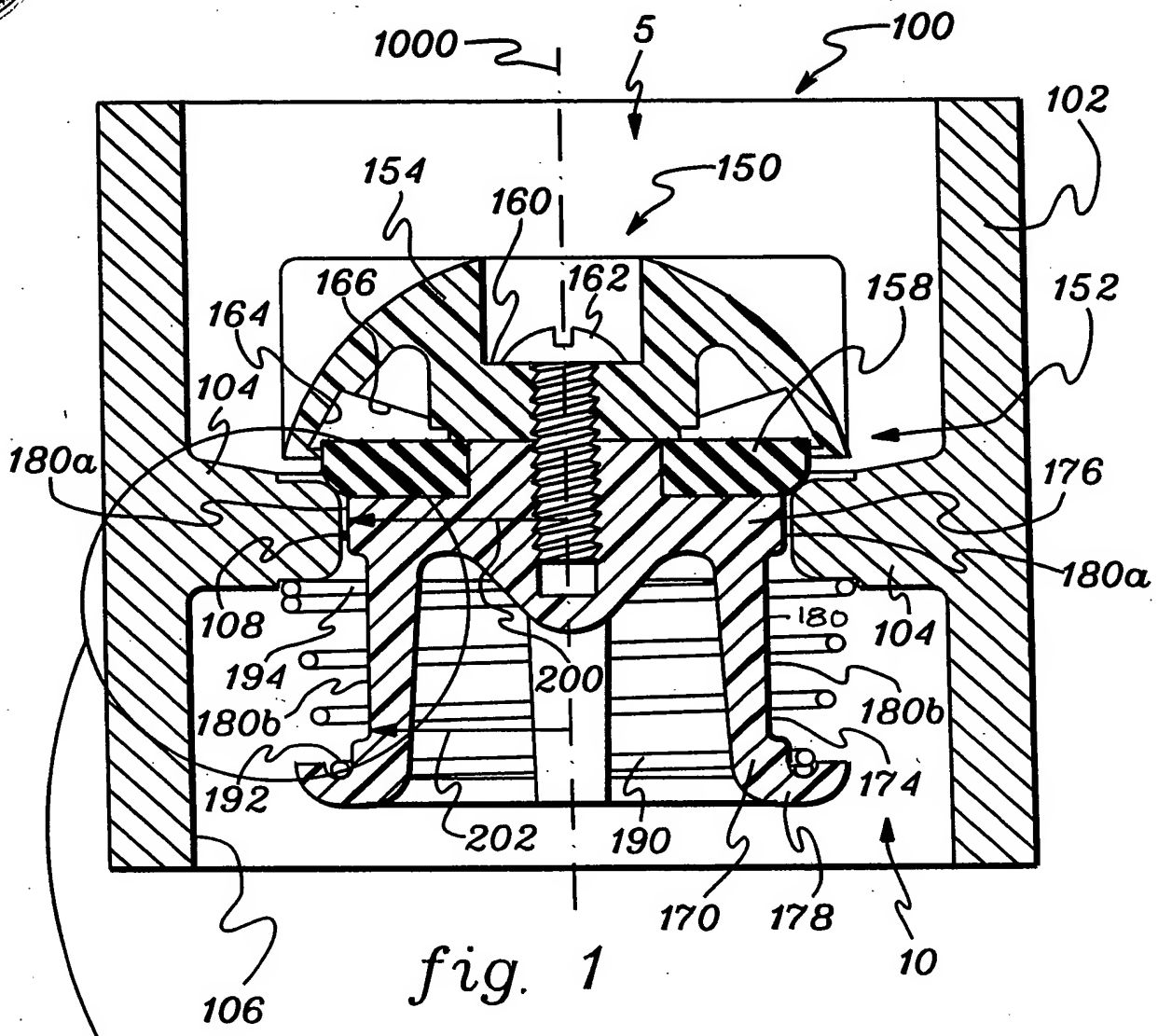

fig. 1

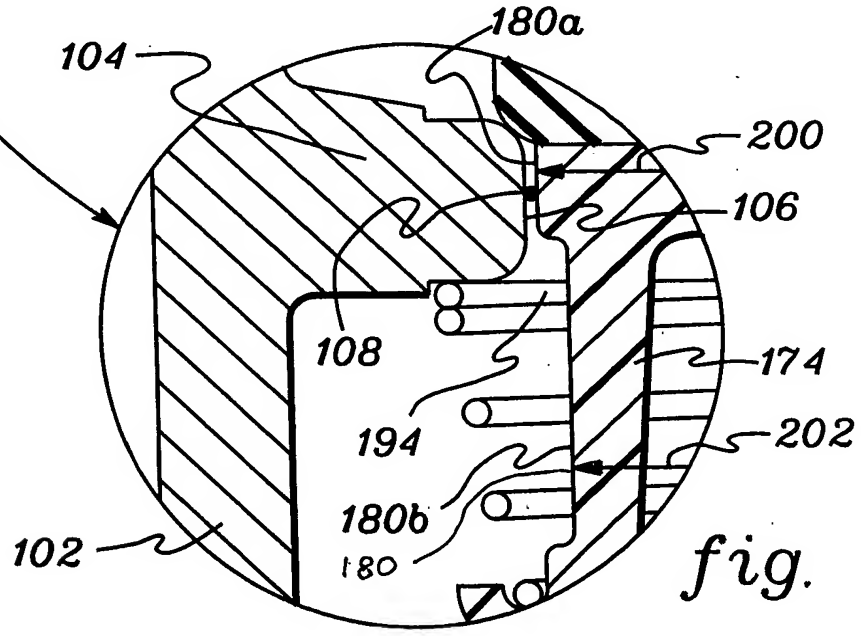

fig. 2

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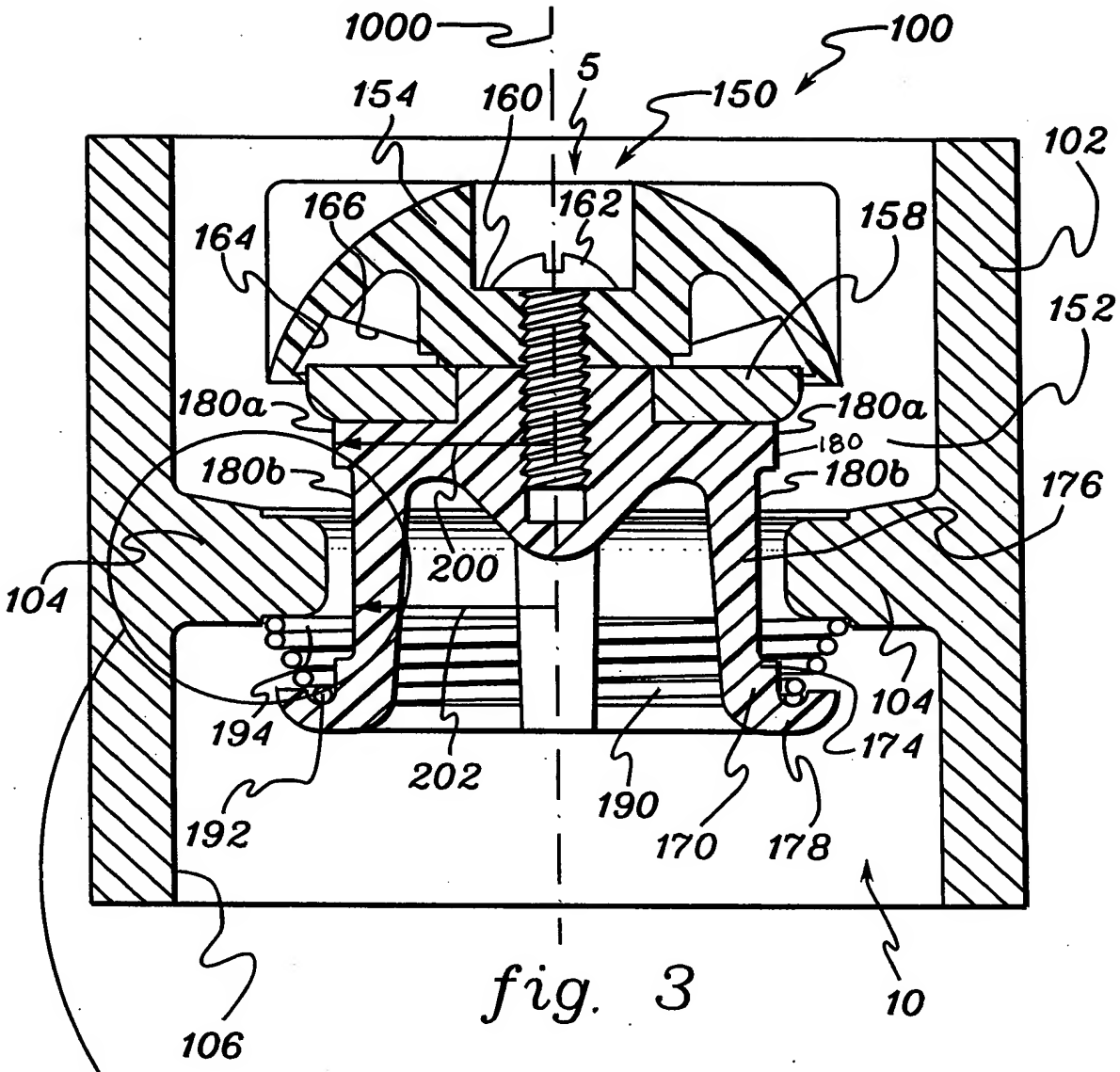

fig. 3

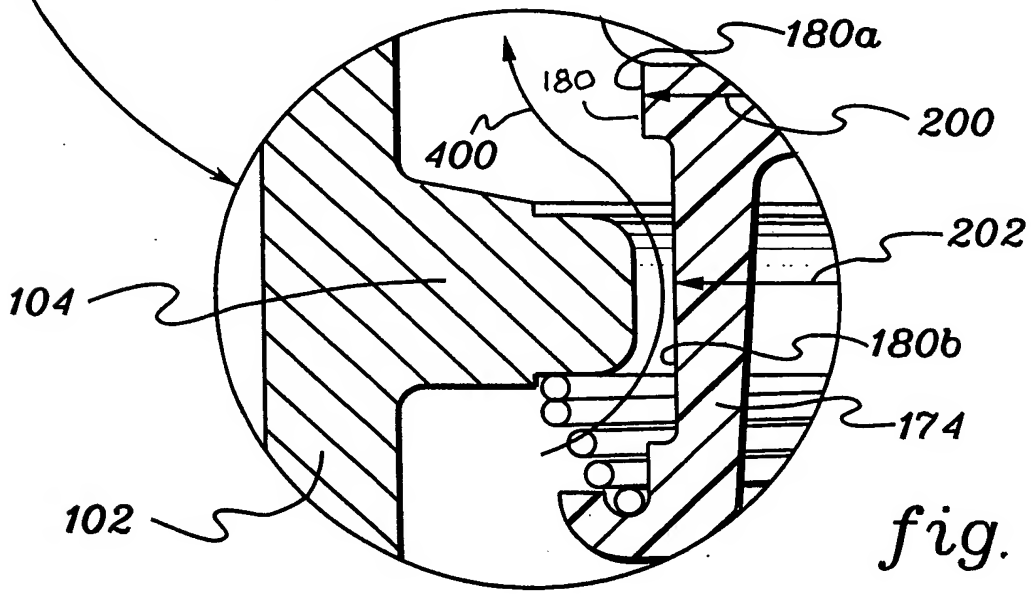

fig. 4

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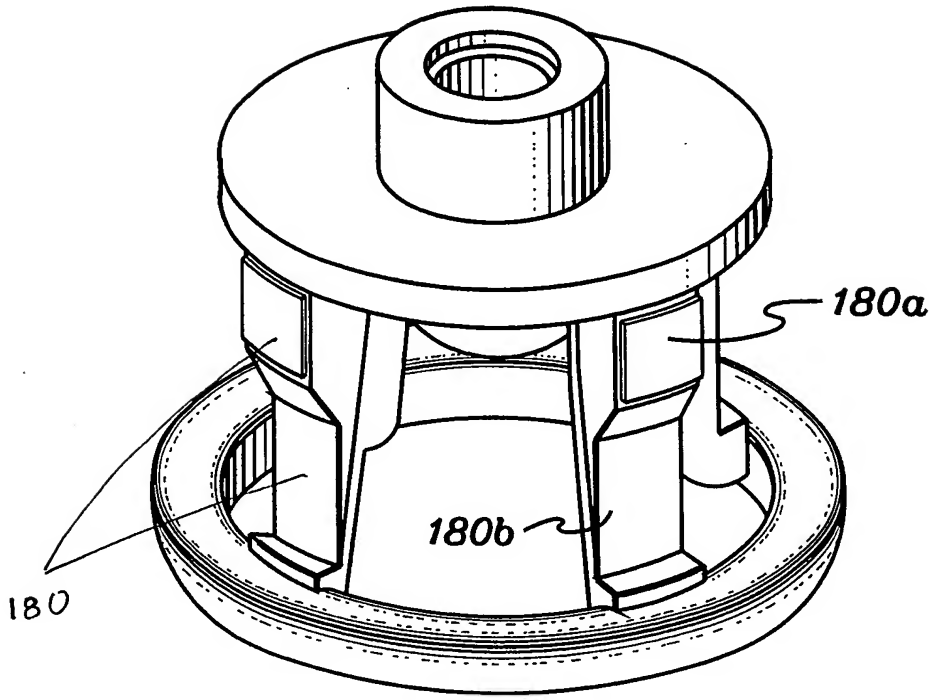

fig. 5A

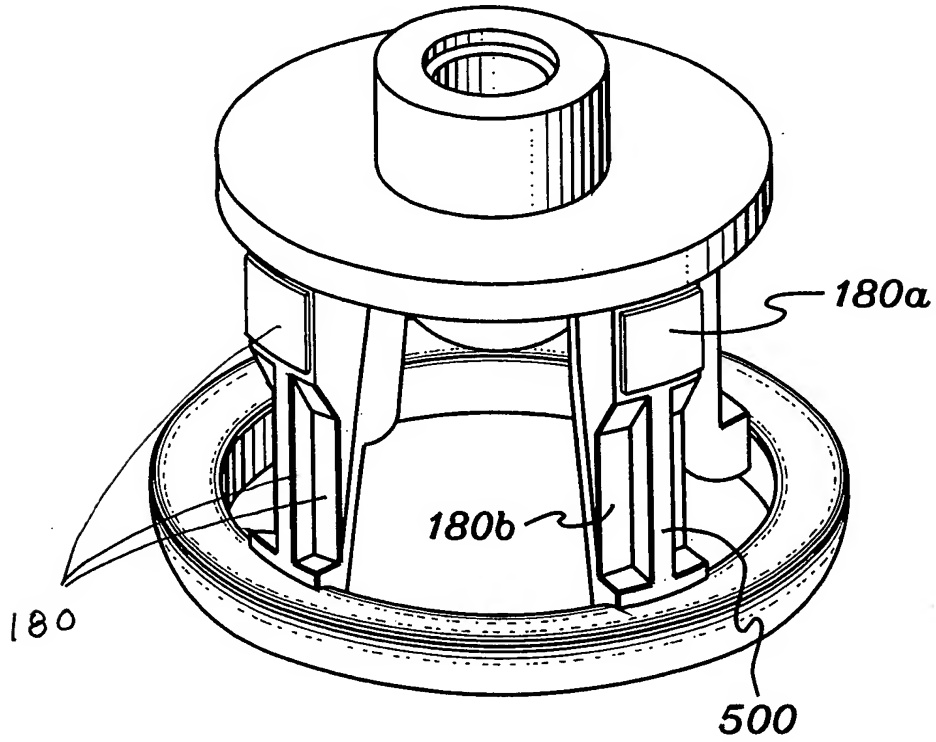

fig. 5B